Approach to the phenomenon of m-learning in English teaching

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Abstract
This research analyzes the situation of mobile devices and some specific options of support for the teaching of the English language. The features of this complex and novel phenomenon of Mobile-Assisted Language Learning (MALL) are addressed with an exploratory descriptive methodology. The article is part of a more extensive research which deals with these resources in education, describes the fast evolution and current situation of the variables that configure the m-learning case and the teaching of a foreign language in primary education in Spain. The aim has been to show the status of this technique and some specific options for education, taking advantage of their level of implementation, its communicative power and friendly ways. The results highlight the attraction of these resources, which also arise with gradual, playful, friendly and manageable activities in tactile form. They are instruments that rely on the audiovisual communication to develop reading and listening abilities of students. But above all, these devices immerse the student in a game or make it protagonist of a story. The teacher can gather these guidelines to enrich and complete his academic activity, exploring solutions that sometimes used mobile devices to attract their users.

Key words
Mobile-Assisted; Language Learning - MALL; M-learning; ubiquitous learning; languages teaching; education and technology.

Aproximación al fenómeno m-learning en la enseñanza del inglés

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Resumen

Esta investigación analiza la situación de los dispositivos móviles y algunas opciones concretas de apoyo para la enseñanza del idioma inglés. Los rasgos de este fenómeno complejo y novedoso de la enseñanza de lenguas con dispositivos móviles (MALL), son abordados con una metodología descriptiva exploratoria. El artículo forma parte de una investigación más extensa sobre estos recursos en educación, describe la rápida evolución de las variables del m-learning y la enseñanza de un idioma extranjero en enseñanza primaria en España. El objetivo ha sido mostrar la situación de esta técnica y algunas opciones específicas para la enseñanza, aprovechando su nivel de implantación, su poder comunicativo y lo amigable de sus presentaciones. Los resultados resaltan el atractivo de estos recursos, que se presentan con actividades graduales, lúdicas, amigables y manejables de forma táctil. Son instrumentos que se apoyan en la comunicación audiovisual para desarrollar las capacidades lectoras y auditivas del alumnado. Pero sobre todo, estos dispositivos sumergen al estudiante en un juego o lo convierten en protagonista de una historia. El docente puede recoger estas pautas para enriquecer y completar su actividad académica, explorando las soluciones que utilizan en ocasiones los dispositivos móviles para atraer a sus usuarios.

Palabras clave

MALL; M-learning; aprendizaje ubicuo; enseñanza de lenguas; educación y tecnología; TICs

I. Introduction

Two factors seem to converge in a context of advanced societies. On the one hand technology is, as set of goods or services specific and advanced, as support of knowledge or innovative skills, or production system and effective use to develop ourselves, to solve problems, cover gaps in knowledge or simply to satisfy desires of any kind. And beside the technology English language appears, become a global communication support. Education and particularly educational systems must give a leading role to these two elements. For this reason, and to form a future society is necessary to analyze the use of technologies and the learning of English as one of the tools to achieve success in human activity.

Works on learning with mobile educational resources, m-learning, are very recent. Liu, Navarrete & Wivagg (2014) rehearsed the educational use of the iPod Touch and the teaching of English as a second language at the primary educational level and conclude on the need to continue to explore these practices given its high potential for its level of implementation in today's society, and especially among young people.

Interpersonal communication digital mobile devices, laptops, tablets and smartphones have been analyzed in this work. About this new technology, the number of investigations is relatively low in comparison with experiences related to other computing devices that take more time in our society. Therefore here deals with the rapid evolution of these instruments and their use in the educational context for learning the English language

II. Methodology and research objectives

This article is part of a more extensive research that addresses mobile devices in education. In this part it's made a descriptive approach to the evolution and current status of variables that configure the m-learning phenomenon and teaching English. Nowadays, all investigations demonstrate the unstoppable advent of mobile devices in learning. Multiple research confirm that contextualizing Mobile-Assisted Language Learning (MALL) practice can improve idiomatic skills and support a foreign language class, and there is a positive sense in the learners' perceptions towards mobile-based learning, for developing listening abilities for instance (Hea-Suk, 2013). The universal and common features of this phenomenon are accessible to approach it from an exploratory introductory descriptive character of the complex and novel phenomenon of m-learning. Currently also include the presence of multiple affordable to experience educational methodologies in teaching English with mobile devices options. These devices and their programs are available for teachers to use them. But, truly, what specific applications are available for the teacher? About these aspects firstly it was analyzed the present situation and its technological development, described the rapid evolution of these devices, the teaching of a foreign language in the Spanish case, and the combination of these variables with specific applications for primary education. So, the objective was to verify whether the apps offered are likely to be used for teaching English. For that, applications were tested in groups of 25 students of 1 to 6 primary courses, depending on the manufacturer's recommendation on the user's age. With the test is intended to determine whether students were able to perform the activities proposed from every app.

Thus the sample of apps described would comply with common characteristics inherent to the total of the relevant software available. We have chosen 17 programs as a reference significant for this part of the phenomenon; specifically these analyzed apps have the following characteristics:

- Educational software for learning English.
- Primary education level.

Applications that do not have educational function have not been considered, why has overlooked language dictionaries, guidelines for language travelers programs, software of augmented reality to incorporate translation on images of captured text in another language, etc. The traits quantified in each application are:

- Denomination.
- Indications of recommended educational level.
- Guidance and educational support, section of parents or teachers.
- Languages available.
- Variety of activities and skills addressed.
- Price.
- Size of the app.
- Entity that produces the software.
- Interaction with social networks.

This descriptive study is intended to achieve the goal of determine the status of the phenomenon and its potential in actual practice of m-learning in learning English. We understand that there is a gap in the rigorous and scientific knowledge on this subject, away from economic or business interests, therefore we need a diagnosis of strengths and weaknesses of this technological dynamics, as well as consider a line of reflection on the real possibilities of these resources so widespread in our society.

III. M-Learning and mobile devices

There is a high and changing variety of portable digital devices, although they are usually grouped in three main categories: the portable computers (laptops), the tablet and smartphone, however, there is another series of devices such as audio players, advanced video game consoles, and other commonly used that share duties and blur their specific purpose.

The laptop is a compact system that brings all the features of the traditional computer equipment which functions are added to allow having mobility and independence through a battery power supply. On the other hand, tablet is also a computer in the form of small table, with no physical keyboard, and reduced to a viewing and touch interaction screen that varies in size according to the model and the company that manufactures. It offers the features of a normal computer equipment enhancing their mobility, so it incorporates an interface, or system of interaction with the user, with easy option to connect to the Internet, play videos, audio, create written documents and other utilities for management on the same screen. At a lower level are smartphones, such as "smart" electronic hand held devices that integrate the functionality of a cell phone and a small computer. With this type of phones in addition to be able to make and receive calls, communication extends to the sending of text messages, e-mail, instant messaging, etc. operate even with audio and video thanks to the management at high speed which have both Internet networks as the new fourth-generation terminals, known as 4G. Smartphones also offer a wide range of connectivity services between users via Wi-Fi access or even the transmission of Internet for other equipments,

in addition to make the basic operations of a PC, managing and storing digital data, manage specific applications or apps, among many other functions (Ilyas & Ahson, 2006).

a. Evolution of portable devices

Desktop personal computers were gradually increasing their potential and reducing its size, allowing them some mobility. In 1968 Alan Key presented a mobile device, Dynabook, for children who could create texts and can be stored on the same machine (De Frutos, 2012). It was a laptop similar to a tablet, since it had a built-in keyboard and a touch or resistive screen. In 1989, Samsung presents the GRiDPad, a first model of tablet with an energy range of 3 hours, working with MS-DOS and could be handled through a pencil. Subsequently, in 1992 Compaq, IBM and Apple offered the first compact computers with similarity to the current tablets under the name of Poquet PC or similar (Castrejon, 2013). The dominance of Microsoft in the late 1990s drives their Tablet PC with the Windows XP Tablet PC operating system. From here, the companies were adding new utilities, reducing its size and popularized these devices distributed between Apple's iPad and other tablets with Android (Michan, 2011) system. In Spain sales of computers has increased considerably in the period of 2002 to reach 74% of Spanish households in 2012 (Instituto Nacional de Estadística, 2012). However, the number of sales of desktops and laptops drops 25% because of the rise of tablets of 68% (Jiménez, 2014).

Mobile is one of the most important technological advances of our history and currently interconnects millions of people. The universal level of implementation of smartphones is given by two characteristic features: the assimilation of new functions of personal computers and the increase of connectivity levels, which is derived from the development of a cellular wireless phone. The name to cellular phones comes from the cell system used, which control the power of broadcast frequencies, allowing re-use and increasing the capacity of the system to include several communications on the same channel (Huidrobo & Conesa, 2006).A switching system connects stations base and the system to the network of public switching (Rodríguez, et al., 1998). This also allows that mobile telephone terminals are located, when they are in operation. Communication between these devices was initiated via radio waves among mobile terminals using intermediate stations as the basis for transmission and reception.

It arises in the 1940s in the United States, when some vehicles incorporate a phone and used analog modulation amplitude, AM, soon after passing the modulated frequency, FM, which produced higher quality audio. The first generation 1G phone began in 1960 when the U.S. Company AT & T launched the direct dial (Nocedal, 2006). It will be in the 80's when the first terminals are sold and when to appear in other countries different networks, some public as, for example, the Japanese NTT (Martín & Priede, 2007) or in emerging countries such as Saudi Arabia with NMT, Nordiska Telphongrupen Mobile technology. Then Europe develops the GSM, Global Special Mobile, system used by almost everyone.

In Spain the Automatic Telephones in Vehicles were prototypes with coverage for Madrid and Barcelona (Martín, 2012). In 1982, the TMA-450 network that improved benefits and reaches the 50 Spanish provinces in 1990 was implemented in Spain. Then came a congestion of users of mobile telephony (Huidrobo, 2011), and created a new system, TMA-900, derived from the British TACS, improving communication in rural areas, where digital coverage was still difficult access (Pérez, 2002). GSM scanning gives the possibility of licensing of mobile telephony that in 1994 assumed a private entity, Airtel (Boldo, et al., 1999).

The scanning process caused large changes giving way to mobile for 2nd generation, 2G. Terminals reduce their size and increase profits with sending data, fax, SMS text messages and other various utilities such as games. They also began to use independent SIM cards to communicate to the user with the telephone operator (Huidrobo, 2011). Shortly after appears the service WAP, Wireless Application Protocol, allowing multimedia texting, MMS, sending images, audio or video of short duration.

The network 3G UMTS, Universal Mobile Telecommunication System, appears in 2001 in Japan and the TD-SCMDA, Time Division Synchronous CDMA, in China and its neighboring countries. These systems have full connection to the Internet as well as specific applications that can play audio files or view videos of longer duration, among other functions. In its last phase increased the speed of access to the Internet with HSPA, High-Speed Packet Access network.

With the implementation in the urban areas of the latest generation 4G again increases the speed of data transmission quadrupling the maximum speed of mobile phones with 3G and almost reaching the speeds we can get with fixed networks. This allows reproducing images and videos in high definition, as well as watching television in HD, among other functions (Blanco, 2010). This evolution seems to not end here and the new generation 5G is already considering (Pastor, 2014).
One of the latest developments in the world of mobile devices is the arrival of the "phablets", a device that combines mobile phone and tablet, hence its name (Phone+Tablet), joins communicative characteristics with digital data management functions and therefore the size of mobile terminals normally exceeds 5 inches. The smartphone also has its version in conjunction with the watch, the Smart Watch: can make calls, set an agenda, and locate to the user with a GPS system, among other functions in addition to indicate the hour position.

Internet functionality is combined with another portable device, the glasses, which are able to find information about elements that are displayed. It also has the ability to record videos and take photos thanks to the camera that is integrated in the body of the device. The Google Glass can be controlled via voice commands or gestures, among other functions (Martínez, 2014).

b. Software for mobile devices

It has described the use of this new technology in the remarkable improvement of the communication between the members of our society, highlighting the 3 main activities made with your mobile device: communication, management of e-mail and access to social networks (The App Date, 2013). Laptops work with traditional operating systems, but the tablets and smartphones have an operating system that controls its operation, and in some cases it is similar for both handhelds and large computers, such as those who work with Windows 8. Others maintain versions that differ from those used in common computers, Windows Phone, iOS, Linux or Ubuntu Touch. Most used specific and incompatible system is Android that operates with 80% of the terminals (Gartner, 2013) and that is linked from 2005 to Google, and is currently also used in tablets and smart TVs (Perochon, 2012).

All of this software gives the possibility to work and carry out activities similar to a traditional computer through specific programs, apps, which can be downloaded from the Internet and installed in the terminal (Cuello & Vittone, 2013). Then they can be used without connection to the internet, although some require the network to operate.

IV. Language Learning

The current globalization process has enabled labor supply increases in all countries and open new doors to the employment which increases migratory flows. But the existence of more than 4000 languages (Merma, 2008) requires to choose a common communication link which for various reasons is still the English language and the vast majority of countries include it within their educational programs (Agudelo, 2010).

In addition to the mere communication global bridge, it seems that learning another language is especially beneficial in many aspects, developed part of the brain responsible for verbal fluency (Lora, 2011), improves various cognitive functions, attention, perception, memory, intelligence and language, causes a more easily focus their attention on what is important and dispense the information which might hinder (Grandinetti, 2011). It even seems that the onset of Alzheimer's can be delayed for about 5 years of average people who dominate both languages. Another benefit of learning a new language is improving the auditory system as anyone who is learning a new language has to look at the different sound variants that exist in different languages, as well as the pronunciation. For Spanish students of foreign languages this aspect is very interesting, because of the large sound differences between the Spanish and other languages, to contain fewer sounds than English or Portuguese, for example.

It’s reiterated the importance of the teaching of a second language in early ages (Cenoz, 2003), where children have a high capacity to imitate, an interest in phonetics, some need to express themselves, less sense of the ridiculous and less inhibitions than the adolescent and adult. And after puberty they begin losing faculties for language learning since the brain plasticity in young children is reduced over the years and as the student grows can learn the second language, but with a foreign accent.

a. Evolution of English learning in Spain

The teaching of the foreign language in Primary Education in recent decades has been approached from different methodological lines (Halbach, 2008) that have generated different results, although in the majority of cases has been a creative exploration on educational forms of proceeding (Ferreira & Morales, 2008). Many of those lines is supported from the beginning in the introduction of new technologies, which provide teachers a new way to organize the sessions and open a wide range of innovative and interesting activities.

In Spain the learning of foreign languages at early ages was not introduced English learning in the educational system to pre-school and primary education until the 1960s. Previously the children did not have any contact with the foreign language until the age of 13, and higher learning was in high school, with more specialized teachers. This teaching of the languages was influenced by the audio-lingual methodology and a structuralism Behaviorism. Immediately starts to propose the inclusion of these subjects at younger ages, as well as certain methodological considerations for these classes from 3rd primary. The LOGSE in 1990 proposed as the final goal of the learning of the foreign language throughout the period of Primary Education, the development of the communicative competence in that language, in all aspects, both linguistic and non-linguistic. But despite efforts to improve the level of English of the Spanish citizens from an early age, the results have not seen a clear improvement, and that is why, in the latest education reform in 2013, LOMCE, the Ministry of Education has insisted on the improvement of the level of this language, introducing first foreign language classrooms since the 2nd cycle of Pre-school Education until high

school. With this reform, support the theories that say that learning a second language should be given in the early ages to master a foreign language.

Currently the general objectives in the official educational curriculum in Spain in the area of foreign language for Primary Education are:

- "Listen and understand messages in various verbal interactions."
- "Read varied texts in a comprehensive way."
- "Learning to use all available means, including new technologies, in order to obtain information and communicate in the foreign language."
- "Rating the foreign language as a means of communication and understanding between people of different cultures, and different content learning tool.
- "Express an attitude receptive, interested and confidence in own learning and use of the foreign language capacity."
- "Identify phonetic, rhythm, accentuation and intonation aspects, as well as linguistic structures and the foreign language lexical aspects and use them as basic elements of communication."

b. ICT and language learning

The importance of technological development in our society has led to the Spanish educational system provides for the Treatment of the Information and the Digital Competence as one of the basic features in Primary and Secondary Education. According to Sánchez and Ruiz (2013) current education has to react with these new digital tools to engage citizens in an increasingly global society where the English language has become vehicle of communication. These circumstances make guidelines for the school and its teachers.

ICTs have been introduced systematically in the Spanish education system, and tablets and smartphones are in common use among students. This phenomenon could be considered global, thus 63% of American children less than 8 years of age use smartphones and 40% tablets (Martín, 2013). In Spain, 66.7% of children aged 10-15 years use mobile phone, and increases up to 97.8% aged between 16 and 24 years old.

These data are related to the educational methodology that transforms *e-learning* to *m-learning* (Laouris, 2005), i.e. goes over from electronic components to equipment with choice of mobility. Although smartphones tend to be prohibited within school premises, they can observe their duties outside the classroom (Fombona & Pascual, 2013). Some school projects are already introducing the use of tablets with what is achieved quickly in execution of activities and its correction, learning based on repetition through games, a greater involvement of the own students (Vera, 2013).

Learning a foreign language is often based on a constructivist framework that would involve a teacher with an active role in assembling the basic knowledge of the student, and not only limited to provide information, but would implement series of unique strategies, as Verdú and Coyle (2002) highlight:

- Modifications and adjustments of the speech of the teacher to facilitate the understanding of the *input.*
- Participation of students in collaborative exchanges where the teacher made scaffolding with the linguistic production, with expansions syntactic and semantic extensions (*extending utterances*).

- Creation of opportunities for the use of the second language in informal or social interaction.

ICTs and language learning agree their communicational traits. López (2013) highlights four macro skills: listening, speaking, reading and writing. Vázquez and Martín (2014) relate these skills with various ICT resources that enhance oral and auditory skills of the students to exposure to real-life communicative situations:

- Listening. TeacherTube's fragments, Youtube-EDU, Radio and TV broadcasts, specific Software for listening, MP3-4, Posdcast and audiobooks.
- Speaking. Audio-video conference, audio recording Software.
- Reading. E-books reader, Google Currents, newspaper apps (FlipBoard), Blogs, social networks and wikis
- Writing. Processor of texts, chat, e-mail, wiki, online discussion, maps creation software, software to create cartoons, software for multimedia presentations; practices of writing in social networks and microblogging.

V. Apps and English learning

In Spain there are about 27 million users of smartphones that have at their disposal some 22 million apps, and the total of these programs downloaded from the Internet every day is more than 4 million (The App Date, 2013). Each operating system has a database with their apps, so phones that use the Android operating system will have to download the applications from its base called Play Store; iOS from App Store, and lesser extent Windows Phone uses Windows Phone Store.

El sistema operativo de mayor implantación en Europa es Android, que ofrece aplicaciones a muy bajo precio o gratuitas. Many of these applications are created by the users themselves, so quickly emerge versions of the same program for Apple iOS platform. Table 1 shows one hundred fifty APPs which were available in Android in 2014; the Google Play platform offers this set of applications under the section of Education. Most of them are free or have very low price. Free apps are offered with the option of paying a small amount to avoid the appearance of advertising inserts inside in many cases. There are two possibilities: those operating totally independent of the Internet (once downloaded) or operated only on-line, it works only when there is direct connection between the device and the Internet.

Android APPs about English education, 2014		
1. 13.000 videos Inglés. Tinh Hoa Viet Co.ltd. 2. 3350+ English Grammar Practice. Buffalo 3. 6 minute English Listening SCD Group 4. Advanced English & Thesaurus. MobiSystems 5. American English Conversation. MS apps 6. American English. American English at State 7. Aprende a hablar Inglés TalkEnglish 8. Aprende Gramática de Inglés	51. English Grammar. Emantra Technologies 52. English Hindi Dictionary. HinKhoj 53. English Idioms and Phrases. Miracle FunBox 54. English Idioms Dictionary. Kreatorz 55. English Idioms. Dreamob 56. English Irregular Verbs. An Ta Minh 57. English Letters. Miracle FunBox 58. English Level Checker Free. Eltsoft LLC 59. English Listening Test.	101. Inglés para niños. Tweeba 102. Inglés. Comprensión auditiva. AxiomMobile 103. Interactive English. Net Languages 104. Johnny Grammar Word Challenge 105. Learn English Conversation: AR. Rwabee 106. Learn English Elementary 107. Learn English Grammar 108. Learn English Grammar. Coderz 109. Learn English in 30 days. tuneform

Transdental 9.Aprende Inglés – English Anspear 10. Aprende Inglés – Voxy. Inc. 11. Aprende Inglés con ABA English. ABA 12. Aprende Inglés gratis. Bravolol – Learn Foreign Languages 13. Aprende Inglés Niños Idiomas. Pinfloy 14. Aprende Inglés. Rwabee 15. Aprende Palabras en Inglés. LanguageCourse.Net 16. Aprender Inglés 6000 Palabras. Fun Easy Learn 17. Audiolibros en Inglés Librivox. IronServices. 18. Babbel - Aprende Inglés. Babbel 19. Big City 20. Cambridge School Dictionary 21. Canciones en Inglés para niños 22. Cartoon Free English, Pitzunda. 23. Chinese English Dictionary. Bravolol – Learn Foreign Languages 24. Concise Oxford English TR. MobiSystems 25. Conversación Inglés. MagikHub 26. Curso de Inglés gratis. Juegos gratis 27. Curso de Inglés. Transcendental 28. Dic. Inglés Español Offline. movin'App 29. Diccionario Inglés – Español. DIC-o 30. Diccionario Inglés – Offline. IronServices.com 31. Diccionario Inglés – Offline. Livio 32. Dictionary English English. app.feee 33. Duolingo - idiomas gratis. Duolingo 34. Easy English. LI DE MIN 35. Ejercicios de Inglés. Inglés divino 36. English (US) Keyboard. TouchPal 37. English Central. EnglishCentral	Quizworld 60. English Monstruo. Cambridge Learning (Cambridge University Press) 61. English Phrasal Verbs. Dreamob 62. English Podcast for Learners. Speak English 63. English Podcast. EBizity 64. English Pronunciation Training. Stavira VN 65. English Pronunciation. KEPHAM 66. English Pronunciation. KJ jessica 67. English Quiz. Viet Talent 68. English Quotes. Miracle FunBox 69. English speaking course. GeekApp1 70. English Speaking Course. Ravit Lyan 71. English Study. SolarDev. 72. English Tenses. Coderz 73. English Tenses. Exam English Ltd 74. ENGLISH TEST. Majed-J 75. English Topics. Rybka Studios 76. English Translator. Livio 77. English Useful Expressions.VN Mobile Apps 78. English Verb Trainer. Appicenter. 79. English Vocabulary Daily. MobileSoftVn 80. English with LinguaLeo. Lingualeo LLC 81. English: Grammar. Midnight Developers 82. English-App : Learn English. Culture Alley 83. English-English Dictionary. Hironori 84. Ensayos en Inglés. Speech-Tech Jewels Games 85. Escuchar Inglés. Speech-Tech Jewels Games 86. ESL Daily English. INAPP 87. Fácil lectura Inglés. Cxj apps and games 88. Fluent English (old). Fluentizer 89. Fun English 90. Funland 91. Gramática de Inglés Free. Eltsoft LLC 92. Guide to English Idioms 93. Hablar Inglés. Learning 2 Talk	110. Learn English Kid: PhonicsStories 111. Learn English Kid: Videos 112. Learn English Speaking. GR Saini 113. Learning English. JD Star 114. LingLing Cursos de Inglés. Hepilabs 115. Listen and Speak. 9Spikes 116. LL English Dictionary-WithAds. LangLearner 117. Music English.Sunny Mobile 118. Offline English Dict. FREE. movin'App 119. Oxford A-Z of English Usage. MobiSystems 120. Oxford Dictionary of English T. MobiSystems 121. Partes del cuerpo en Inglés. Muratos Games 122. PhrasalStein 123. PlayTales Gold 124. Practice English Grammar – Sam. Cleverlize 125. Practice English Grammar. Cleverlize 126. Principiantes Ingléses juego. Bryan Rolandsen 127. PvP - Phrasal Verbs Program. Nural 128. Question Tags. Webrich 129. Radio English. pocketdigi 130. ScanNews : Study English News. Nextmining 131. School idol festival. KLab 132. Speak English Correctly. Orange Duck Studios 133. Speak English Daily. MS apps 134. Speak English Easily. Alho00ot 135. Speak English Fluently. Miracle FunBox 136. Speak English Like an American. Language Success Press 137. Speak English. 3Prism 138. Speak English. APPJUNGS 139. Study English By Listening. Vnsupa for education 140. Test Your English I. Martin K. 141. Test Your English II. Martin K. 142. Test Your English III. Martin K. 143. Test Your English Vocabulary. Martin K.

38. English Dictionary. Bravolol – Learn Foreign Languages 39. English for Kids. Busuu Pham Viet Dzung 40. English for Smart Keyboard. Dexilog. LLC 41. English Grammar Book. Appsoftindia 42. English Grammar Exercises. iWard. 43. English Grammar Handbook. Miracle FunBox 44. English Grammar in Use. Cambridge Learning 45. English Grammar – Preposition. engsoft.tc 46. English Grammar Test. Miracle FunBox 47. English Grammar Tests. J.Kolisek 48. English Grammar Ultimate. maxlogix 49. English Grammar. Buffalo Software 50. English Grammar. Coderz	94. How to Speak Real English. DS&T_Modern English Studio 95. Idiomas Inglés gratis. Maria Prikhodko 96. Improve English Grammar. Leap Learning Solutions 97. Inglés de negocios. Exam English Ltd 98. Inglés divertido de Studycat. Studycat 99. Inglés Gramática Prueba. SevenLynx 100. Inglés Gramática. Quizworld	144. The Holy Quran – English. Peace Through Understanding 145. The Phrasal Verb Machine 146. Traductor de Google. Google Inc. 147. Tutor de Inglés SpeakingPal. SpeakingPal 148. Verbos Inglés. Appicenter LLC 149. Verbos irregulares del Inglés. Inglés divino 150. VoiceTube- 看影片學英語. VoiceTube

Table 1. Android Apps about English language offered by Google Play platform.

In this case there has been made an introductory descriptive analysis over 11,3% of all, it is 17 applications that address the teaching of English at primary school level and appear in Table 2. In our research, student groups of primary school have tested these apps and the result was satisfactory performance. That is, the program was working properly and can perform the requested activities at all times. This shows that are suitable for use in the classroom as an educational aid instrument in teaching the English language. They are listed below:

- *Canciones en inglés para niños.* Software about songs for children. Each one accompanied by a video animated as well as its letter.
- *English for kids with Busuu.* Learning through interactive games, also enables to learn from peers with the application in another part of the world via video chat, among other methods. It provides extensive vocabulary practice and comprehensive audio visual learning material with photos and recordings by native speakers.
- *English Irregular verbs.* Game about addresses irregular verbs.
- *Playtales Gold.* This application contains several classic tales in form of cartoon, accompanied by music.
- *Fun English.* Interactive games about learning English. These interactive games are focused on learning basic concepts of the language such as colors, animals, etc. and to recognize what is heard.
- *Inglés para niños by Tweeba.* Application based on the flashcards, cards with images of the corresponding to each lesson vocabulary. They are divided by topics such as numbers, body parts, animals and other issues.

Some educational institutions of the United Kingdom as the British Council and the prestigious Cambridge University have created specific applications for training and evaluation of the English

language. They have produced several mobile apps with the aim of promoting the use of English. The analyzed were:

- *LearnEnglishKids: Videos.* It offers 10 tales. Listen, read, and understand the English language, are the three skills that are developed. Other versions, such as *LearnEnglishKids: PhonicsStories* (iOS), dealt with the different sounds of the English language.
- *LearnEnglishKid: PhonicsStories*. A phonics-based, interactive storybook app that features audio narration and fun games. The story follows the space spies Sam and Pam, they arrive on Earth and learn how to speak and spell English words.
- *LearnEnglishElementary*. Developed on the listening skill and reading comprehension based on podcasts of dialogue for 20 minutes each.
- *LearnEnglishGrammar*. Application serves to reinforce grammatical knowledge four levels and activities of different rhythm.
- *Johnny Grammar Word Challenge.* Application of questions about vocabulary, grammar and daily English spelling with different levels of participation.
- *Big city.* Based on podcasts with stories and cartoon.
- *Cambridge School Dictionary.* App of vocabulary and meanings.
- *The PhrasalVerb Machine & Phrasalstein*. A game mode app which deals with verbs formed jointly with prepositions that change the meaning to the verb base.
- *Phrasalstein*. It teach 100 phrasal verbs using animations inspired by the classic "horror movie" genre, with a touch of humor and irony.
- *English Monstruo.* Application to show the most typical mistakes of Spanish-speakers to learn English.
- *Funland*. Game to win prizes. It develops the oral competence, knowledge of vocabulary and basic grammar.

Educational level	**Denomination**	**Guidance and educational support**	**Language**	**Activities**	**Price**	**Size MB**	**Social Network**
1st -2nd Primary Ed.	*LearnEnglishKid: PhonicsStories*	YES	English	YES	7.99€	1,33	YES
1º-2º Primary Ed.	*Fun English*	YES	Spanish, English, French, German, Chinese, Italian, Japanese, Portuguese	YES	Free sample/ 1,5€ each lesson	77,5	YES
1st -2nd Primary Ed.	*English for kids with Busuu*	YES	English, Spanish	YES	Free	30	NO
1st -3th Primary Ed.	*Inglés para niños*	NO	English, Spanish	YES	Free	31,2	NO
1st-3th Primary Ed.	*Canciones en inglés para niños*	YES	English, Spanish	NO	Free / Different prices	39,1	YES
1st -3 th Primary Ed.	*LearnEnglishKid: Videos*	YES	English	NO	Free	10,75	YES
1st -3th Primary Ed.	*Cambridge School Dictionary*	NO	English	NO	8,99€	2,83	NO
1st-4th	*PlayTales Gold*	NO	Spanish,	NO	Free /	18,3	YES

Primary Ed.			English, French, German, Chinese, Italian, Japanese Portuguese		2,99€ month 19.9€ annual		
3th -4th Primary Ed.	*Funland*	NO	Spanish, English, French, German, Chinese, Italian, Korean, Portuguese, Vietnamese	YES	Free	31,8	NO
3 th-6 th Primary Ed.	*LearnEnglish Elementary*	NO	English	YES	Free	2,79	YES
3 th-6 th Primary Ed.	*LearnEnglish Grammar*	NO	Chinese, English, Spanish, Italian, Japanese	YES	Free / 0,85€ each pack	18,3	YES
4th-6th Primary Ed.	*Johnny Grammar Word Challenge*	NO	English, Chinese, Spanish	YES	Free	25,4	YES
4th-6th Primary Ed.	*The Phrasal Verb Machine*	NO	English, Spanish, Italian, French, Portuguese, German, Russian	YES	Free	47,6	YES
4th-6th Primary Ed.	*PhrasalStein*	NO	English, Spanish, Italian, French, Portuguese, German, Russian	YES	Free	64,1	YES
5th-6th Primary Ed.	*Big City*	NO	English	NO	Free	1,75	YES
5th -6th Primary Ed.	*English Monstruo*	NO	English, Spanish	YES	Free	60,5	YES
5th -6th Primary Ed.	*English Irregular Verbs*	NO	English	YES	Free	2,7	NO

Table 2. Descriptive analysis of the sample of APPs.

VI. Results

All analyzed applications are designed for a variety of age or educational level concrete, and the contents of each application are graduates in quantity and complication, which promotes the appropriate level of educational implementation. Thus, applications whose recipients are children of

1st or 2nd Primary Ed., such as *Fun English,* contain very simple aspects such as vocabulary related to colors, numbers or animals. However, apps for more advanced ages and superior levels of elementary, contain more complex aspects by their broader vocabulary, longer texts listening exercises, and not focus on narrations of stories, but in real life stories, as you can be seen in *Big city.*

We observe that there are "Guidelines and educational support" under different headings, and in some cases appear under the heading "Parents Section". These features appear when the level of education is lower or the application appears with a purely educational feature.

We have found many applications that offer their information, texts and activities only in the English language, what makes us think that it is designed without a specific recipient language profile which hinders a proper design that contemplate the particularities of each language conception. In some cases, such as *Fun English* or two apps related to the *Phrasal verbs*, offer interfaces with multiple languages which tell us that its offer of learning English can be used in many parts of the world. However the fact that information appears in multiple languages does not mean that educational program has been designed to adapt to that particular students.

It's a common denominator the playful sense of teaching activities offered in most investigated applications that propose fun tasks, interactive and entertaining games. The use of songs in English on these educational levels is an instrument that motivates children and brightens up the learning of the student in addition to being a great educational resource to learn certain grammatical structures (Chacon, 2009). It supports the strong positive correlation between usage intention and performance expectancy, and attitude toward using technology (Nakano, et al. 2013).

This feature suggests that it intends to enhance the attractiveness of the product, so most is free at least at basic levels. Subsequently you can buy other additional content for relatively low prices. Many applications offer interaction with social networks, both to notify the results of any activity, as it is the case with *English Monstruo*, or to connect with the authors, for example the British Council, this favors the suggestion and chance to explore other applications of the own creator directly.

There are a number of features detected on the way of presenting the contents:

- Presentation of the activities based on mobile and static graphics. It is denoted in its design an effective use of the perceptual theories of Gestalt observing the laws of separation fund/figure.
- Playful sense and entertainment, abundance of worlds of fantasy and fiction surrounding narrations.
- Simplicity and short duration of the texts.
- Sound and written transcription of these texts.
- Hyperlinks to enlargement content.
- Practical evaluation activities presented as challenges to the user.

It seems this generation is highly geared towards this evolving new mobile technology, we as educators and language teachers have no choice but to adapt ourselves to adopt mobile learning in our teaching and development of educational materials. We need to re-conceptualize learning for the mobile age and to equip educators at individual and institutional levels with appropriate designs for learning that can cope with and work well for new generations of learners who take the use of sophisticated technology for granted (Al Saidi, 2013). Further, educational methodologies must find mobile devices as a support tool. Failing to do so, will only result in widening the gap between

educators' ideas about learning and those of their students. The challenge for us as educators is how to best utilize this unbelievably fast growing technology within the framework of the well-established methodologies based on current learning theories to avoid offering learning experiences to our learners that are merely technology-driven. Another challenge is also to consider unique learning and teaching solutions and experience for unique educational and cultural contexts and to resolve the threats felt by some educators as well as learners and consequently their resistance to this new mode of learning.

One of the specific key features is the playful and creative nature of these applications. In this sense we agree Chinthammit and Thomas's analysis and their findings (2012) about the use multimodal authoring and principles drawn from alternate reality gaming to create a unique context for children to learn to be sophisticated content creators. This idea is very important in most apps. So, especially children, want to live an adventure, they want to be protagonists in the story of their learning, irrespective of the difficulty levels (Kucirkova, et al. 2014).

VII. Conclusion

Technology and English language converge with new dynamics with interest for methodological innovation in the classroom. In less than 50 years, mobile devices have emerged and have become universal and interdisciplinary tool that can serve as support to certain educational activities. Something similar has happened with the teaching and learning of a second language, which could well exploit some of the here described techniques that drive the introduction of these new ICTs among the young. All these new resources are linked to new strategies that generate high motivational components. The relational power joins their potential for communication with students and their choices to pave the way for work in a digital context.

These devices are already attractive by it, but also its applications are presented with playful and friendly ways for its users, with games, songs, stories where children can interact through direct instructions through the touch on the screen. They offer different levels of activity, with multimedia presentations, developing reading competence and listening in a synchronous manner, develop understanding of texts of different levels by associating pictures and drawings with real-world, or even to propose activities on advanced grammar and spelling competition.

The teacher should not plan its academic activity aside from technological dynamics, and must complement the traditional methodologies with these new approaches and strategies, exploring the most effective solutions for each case and using these instruments as models and references for support.

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Recommended citation

García,S. and Fombona,J. (2015) Approach to the phenomenon of m-learning in English teaching. In: *Digital Education Review, 28*, 19-36. [Accessed: dd/mm/yyyy] http://greav.ub.edu/der

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